

REMARKS

The Office Action rejects claims 17-29, 31-40, and 42-50 under 35 U.S.C. § 101. Additionally, the Office Action rejects claims 17-22, 24-29, 32-40, and 42-50 under 35 U.S.C. § 103(a) as being unpatentable over Helmly, Jr. et al. (U.S. Patent No. 4,605,081) in view of Reisman (U.S. Patent No. 7,406,436). Additionally, the Office Action rejects claims 23 and 31 under 35 U.S.C. § 103(a) as being unpatentable over Helmly and Reisman in view of Schlessinger (U.S. Patent No. 7,136,787).

Applicant thanks Supervisory Examiner Mooneyham and Examiner Fisher for the courtesy extended to Applicant's representative during the personal interview conducted on February 16, 2011. During the interview, Applicant's representative explained that Helmly cannot support a *prima facie* case of obviousness of the claims at least because Helmly would not give a person of ordinary skill in the art any reason to implement claimed features like those recited in claim 17 of "determining a history of deviations of the recorded payload weight data from the target payload; and modifying the target payload for future hauling events based on the history of deviations such that an actual loading profile of the one or more pieces of equipment for the calendar period of time substantially complies with the payload standard" (emphasis added). Helmly focuses on ensuring compliance with vehicle weight laws and, thus, determines the target payload for a given vehicle by looking up the payload that the vehicle can legally carry. See Col. 1, ll. 9-33 and 55-63; and col. 2, ll. 62-66. As Applicant's representative explained, and as explained in greater detail below, it would not have been obvious to deviate from legal weight requirements by altering Helmly to "modify[] the target payload for future hauling events based on [a] history of deviations."

In response, Examiner Fisher hypothesized that a person of ordinary skill in the art would have found it obvious to modify Helmly's target payload if and when loading histories showed that Helmly's automated loading system was malfunctioning and missing the target payload. As best understood by Applicant's representative, Examiner Fisher theorized that the obvious solution to a malfunctioning automated loading system missing the payload target it receives would be misrepresenting the target amount to the automated loading system in attempt to get it to load the amount actually desired. As Applicant's representative explained during the interview, this theory does not make sense because the obvious solution to such a problem is to fix the malfunctioning loading system, not to purposely generate an erroneous target value in the hope that the loading system will malfunction the right amount to provide the load actually desired. Supervisory Examiner Mooneyham agreed with Applicant's representative that Helmly, by itself, does not support a *prima facie* case of obviousness of the claims.

During the interview, Supervisory Examiner Mooneyham also indicated she believed the claims did not comply with 35 U.S.C. § 101. Examiner Fisher indicated he would address this issue in the next Office Action, and Applicant's representative indicated that Applicant would respond accordingly.

By this Reply, Applicant has amended independent claims 17, 33, 38, 40, and 49, as well as dependent claims 18-29, 31, 32, 37, 39, and 42-48. Applicant respectfully submits that the originally filed application and drawings fully support the amendments to the claims. Claims 17-29, 31-40, and 42-50 are currently pending.

Rejection of Claims 17-29, 31, 32, 38-40, and 42-48 35 U.S.C. § 101

The Office Action rejects claims 17-29, 31, 32, 38-40, and 42-48 under 35 U.S.C. § 101 based on the hypothesis that the claims could be directed to just a signal. Office Action at p. 3. For the purpose of advancing prosecution and without necessarily agreeing with the allegations in the Office Action, claims 17-29, 31, 32, 38-40, and 42-48 have been amended to recite “[a] non-transitory computer-readable medium” (emphasis added). Accordingly, these claims recite a patent-eligible article of manufacture under 35 U.S.C. § 101, consistent with the U.S. Patent and Trademark Office’s Notice titled “Subject Matter Eligibility of Computer-Readable Media” dated January 26, 2010, which is attached herewith. As this Notice explains, an amendment to recite “non-transitory computer-readable medium” does not raise issues of new matter unless the subject matter of the application is such that “a signal *per se* is the only viable embodiment” (emphasis in original), which is not the case here. Here, the disclosed algorithms for determining target payloads lend themselves to implementation via encoding in non-transitory computer-readable mediums like, for example, disk drives, CD-ROMs, and optical drives, as indicated, e.g., in paragraphs 33 and 38 of the originally filed application. Thus, Applicant respectfully requests withdrawal of the rejection of claims 17-29, 31, 32, 38-40, and 42-48 under 35 U.S.C. § 101.

Rejection of Claims 33-37, 49, and 50 under 35 U.S.C. § 101

The Office Action rejects claims 33-37, 49, and 50 under 35 U.S.C. § 101 because “the various limitations appear to be just software ‘modules’ and as such, are non-statutory.” Office Action at p. 3. For the purpose of advancing prosecution and without necessarily agreeing with the allegations in the Office Action, Applicant has

amended claims 33-37, 49, and 50 to clarify that the “processing module” recited in each of these claims includes a “processor.” Support for this amendment can be found at least in paragraph 36 of the originally filed application. Because this ties the claims to a particular machine, Applicant respectfully submits that the amendments to claims 33-37, 49, and 50 should address the concerns expressed by the Office Action. Accordingly, Applicant respectfully requests withdrawal of the rejection of these claims under 35 U.S.C. § 101.

Rejection of Claims 17-22, 24-29, 32, 42, and 44-47 under 35 U.S.C. § 103(a)

As agreed by Supervisory Examiner Mooneyham in the personal interview conducted on February 16, 2011, Helmlly cannot, by itself, support a *prima facie* case of obviousness of claims 17-22, 24-29, 32, 42, and 44-47. And, as discussed in greater detail below, Applicant respectfully submits that the addition of Reisman in support of the rejection adds nothing of significance to the analysis. Thus, the present Office Action still fails to clearly address all features of the claims. For example, the Office Action fails to clearly address the features of “determining a history of deviations of the recorded payload weight data from the target payload; and modifying the target payload for future hauling events based on the history of deviations such that an actual loading profile of the one or more pieces of equipment for the calendar period of time substantially complies with the payload standard” (emphasis added), as recited in claims 17-22, 24-29, 32, 42, and 44-47.

Helmlly does not teach or suggest these claim features, and nothing in Helmlly would create any reason to implement these claim features. To the contrary, Helmlly teaches away from these claim features. Helmlly focuses on ensuring compliance with

weight regulations and laws for trucks. See Col. 1, ll. 9-33 and 55-63; and col. 2, ll. 62-66. Accordingly, Helmly discloses using a scale and sensors to automatically determine the payload weight allowed for a truck by applicable weight laws and/or regulations. Col. 1, l. 64-col. 2, l. 8. Helmly discloses controlling an automatic loading system to load the truck with the determined legally allowed amount of payload. Col. 2, ll. 27-35. Thus, in Helmly, the target payload for a given vehicle is the payload mandated by applicable laws and/or regulations. Helmly does not teach or suggest modifying this target payload for future hauling events from the legally mandated amount. Thus, Helmly fails to teach or suggest at least the claim features of “modifying the target payload for future hauling events based on the history of deviations.”

Indeed, Helmly’s focus on ensuring compliance with vehicle weight laws and regulations would discourage modifying the target payload used by Helmly’s system from the legally mandated amount based on prior deviations. Complying with vehicular weight laws and/or regulations has nothing to do with deviations of prior loads from the laws and/or regulations; every load must individually comply with the laws and/or regulations, without regard to the weights of prior loads. If a history of overloads exists, underloading future loads is not necessary for legal compliance going forward and cannot bring the operator back into legal compliance with respect to past overloads. Thus, targeting to underload future loads would only waste available hauling capacity. Conversely, a history of underloads does not afford an operator the opportunity to load a vehicle beyond legal weight limits. Thus, targeting to load a vehicle with more than the legal payload would amount to planning to violate weight regulations and laws. Helmly’s focus on complying with weight regulations and laws would discourage this

practice and, therefore, teaches away from modifying its system to implement the claimed features.

Yet, even after Applicant's representative explained the foregoing reasons that Helmlly teaches away from the claimed features, Examiner Fisher persisted in his belief that the claims are obvious over Helmlly. In the personal interview conducted on February 16, 2011, the Examiner hypothesized that a person of ordinary skill in the art would have found it obvious to modify Helmlly's target payload if and when loading histories showed that Helmlly's automated loading system was malfunctioning and missing the target payload. As best understood by Applicant's representative, Examiner Fisher theorized that the obvious solution to a malfunctioning loading system missing the target payload would be misrepresenting the target amount to the loading system in attempt to get it to load the amount actually desired. As Applicant's representative explained during the interview, this theory does not make sense because the obvious solution to such a problem is to fix the malfunctioning loading system, not to purposely generate an erroneous target value in the hope that the loading system will malfunction the right amount to achieve the load actually desired.

Supervisory Examiner Mooneyham agreed with Applicant's representative that Helmlly, by itself, could not support a *prima facie* case of obviousness of claims 17-22, 24-29, 32, 42, and 44-47. Accordingly, in attempt to salvage the rejection of the claims, the Office Action newly cites Reisman. Applicant respectfully submits that the citation of Reisman does nothing to further prosecution of the present application. Like Helmlly, Reisman fails to teach or suggest the claim features of "modifying the target payload for future hauling events based on the history of deviations." And the Office Action does

not assert that Reisman teaches or suggests these claim features. Instead, the Office Action asserts only that “Reisman teaches collecting data on an item to ensure warranty compliance.” Office Action at p. 5. Even if this were accurate, the Office Action offers no coherent explanation of how this relates to or renders obvious the claim features of “modifying the target payload for future hauling events based on the history of deviations.”

Furthermore, contrary to the assertion of the Office Action, Reisman does not even teach or suggest using data to ensure warranty compliance. Instead, Reisman discloses systems for gathering data related to products after their sale and providing that data to consumers to help them make informed purchasing decisions. See, e.g., Col. 1, ll. 18-24 and 55-67; and col. 2, l. 13-col. 4, l. 35. The data that Reisman’s systems gather includes subjective product ratings from the owners, as well as objective operating data. See, e.g., Col. 3, ll. 29-35; col. 3, ll. 44-47; and col. 5, ll. 25-42. Reisman notes that similar information, such as information about warranty repairs performed, had previously been collected by manufacturers but not made available to consumers for making purchasing decisions. Col. 2, ll. 29-36.

Beyond noting that the process associated with warranty repairs may allow gathering valuable information that customers may use to evaluate the merits of a product, Reisman says nothing about warranty compliance. One of the portions of Reisman cited by the Office Action, col. 37, ll. 65-66, forms part of an appendix of “sample data elements” that Reisman’s system may use and cryptically recites only: “Improper operation data (delayed maintenance/excess load).” Whatever this phrase does convey, it does not convey that Reisman’s system somehow uses the data it

gathers to ensure compliance with warranty. Indeed, the other portion of Reisman cited by the Office Action, col. 24, ll. 1-7, constitutes one of many portions of Reisman teaching that its system uses the gathered data, including subjective product evaluations or “ratings,” for the purpose of helping consumers make better purchasing decisions. See also col. 1, ll. 18-24; col. 2, ll. 13-20; and col. 3, ll. 10-36. This has nothing to with ensuring warranty compliance, let alone “modifying the target payload for future hauling events based on the history of deviations” as recited in the claims. Thus, Reisman adds nothing more relevant to Applicant’s claims than what Helmly discloses.

For at least the foregoing reasons, Applicant respectfully submits that the Office Action has not established a *prima facie* case of obviousness of claims 17-22, 24-29, 32, 42, and 44-47. Accordingly, Applicant respectfully requests withdrawal of the rejection of these claims under 35 U.S.C. § 103(a).

Rejection of Dependent Claim 43 Under 35 U.S.C. § 103(a)

Applicant respectfully submits that claim 43, which depends from claim 17, is patentable over the cited references for at least the above-discussed reasons that claim 17 is patentable over the cited references. Additionally, claim 43 recites “wherein the recorded payload weight data for a number of the multiple different hauling events is less than the target payload, and modifying the target payload includes **increasing the target payload for future hauling events**” (emphasis added). Helmly and Reisman fail to teach or suggest these claimed features, and the Office Action attempts address this deficiency by simply suggesting that a person of ordinary skill in the art would have found it obvious to modify Helmly’s system to operate in the claimed manner. See Office Action at p. 7.

This assertion of the Office Action flies directly in the face of Helmly's primary purpose of ensuring compliance with vehicular weight limit laws and/or regulations. As discussed above, the target payload in Helmly is the legally mandated maximum payload for each vehicle. Thus, by asserting that a person of ordinary skill in the art would have found it obvious to modify Helmly's system to include "**increasing the target payload for future hauling events**" (emphasis added), the Office Action suggests that a person of ordinary skill in the art would have found it obvious to plan to load a vehicle with a payload greater than the maximum allowed by law. A person of ordinary skill in the art would understand that planning to load a vehicle beyond legal limits directly contradicts Helmly's purpose of ensuring compliance with weight laws and regulations. Accordingly, Applicant respectfully submits that Helmly teaches away from the features recited in claim 43.

For at least the foregoing reasons, Applicant respectfully submits the Office Action fails to establish a *prima facie* case of obviousness of claim 43. Accordingly, Applicant respectfully requests withdrawal of the rejection of claim 43 under 35 U.S.C. § 103(a).

Rejection of Dependent Claims 23 and 31 under 35 U.S.C. § 103(a)

Applicant respectfully submits that the Office Action does not establish a *prima facie* case of obviousness of dependent claims 23 and 31. Each of dependent claims 23 and 31 depends from independent claim 17 and, therefore, recites, *inter alia*, "determining a history of deviations of the recorded payload weight data from the target payload; and modifying the target payload for future hauling events based on the history of deviations such that an actual loading profile of the one or more pieces of equipment

for the calendar period of time substantially complies with the payload standard” (emphasis added). As discussed above, Helmly and Reisman fail, both individually and collectively, to support a *prima facie* case of obviousness of these claim features. Applicant respectfully submits that Schlessinger fails to cure this deficiency. Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 23 and 31 under 35 U.S.C. § 103(a).

Rejection of Claims 33-40 and 48-50 under 35 U.S.C. § 103(a)

Applicant respectfully submits that the Office Action does not establish a *prima facie* case of obviousness of claims 33-40 and 48-50. Claims 33-37 recite, *inter alia*, “a processing module, connected to the input module, the processing module including a processor programmed to: . . . modify the target payload for future hauling events based on the history of deviations.” Claims 38, 39, and 48 recite, *inter alia*, “providing a modified target payload weight for the piece of equipment that differs from a historical target payload weight.” Claim 40 recites, *inter alia*, “generating as a result of the analysis, a second target payload based on the payload weight data, the second target payload being different from the first target payload.” Claims 49 and 50 recite, *inter alia*, “based on the analysis, provide a modified target payload weight for the piece of equipment that differs from a historical target payload weight.” Applicant respectfully submits that Helmly and Reisman fail, both individually and collectively, to support a *prima facie* case of obviousness of these claim features for reasons similar to those discussed above that these references fail to support a *prima facie* case of obviousness of similar features recited in claims 17-22, 24-29, 32, and 42-47.

Thus, Applicant respectfully submits that the Office Action does not establish a *prima facie* case of obviousness of claims 33-40 and 48-50. Accordingly, Applicant respectfully requests withdrawal of the rejection of these claims under 35 U.S.C. § 103(a).

Conclusion

In view of the foregoing, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.

The Office Action contains characterizations of the claims and the related art with which Applicants do not necessarily agree. Unless expressly noted otherwise, Applicant declines to subscribe to any statement or characterization in the Office Action.


Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

If the Examiner believes a telephone conversation might advance prosecution, the Examiner is invited to call Applicant's undersigned agent at 202-408-4492.

Respectfully submitted,

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GARRETT & DUNNER, L.L.P.

Dated: June 24, 2011

By: 
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Attachment: U.S. Patent and Trademark Office Notice titled "Subject Matter Eligibility of Computer-readable Media" dated January 26, 2010